in the United States Pharmacopœia as *Strontii Bromidum*, Strontium Bromide. It is in "colorless, transparent, hexagonal crystals, odorless, and having a bitter, saline taste. Very deliquescent. Soluble in 1.05 parts of water at 15° C. (59° F.) and in 0.5 part of boiling water. It is readily soluble in alcohol, and is precipitated from this solution upon the addition of an equal volume of ether, in which it is insoluble. When heated the crystals at first melt and then lose all their water (30.4 per cent.). The anhydrous salt fuses at 630° C. (1166° F.). To a non-luminous flame the salt communicates an intense, red color. The aqueous solution is neutral to litmus paper" (U. S. P.). Owing to the extreme deliquescence of this salt it should be kept in well-stoppered bottles.

As in the case of the strontium salts generally, this one closely resembles in its effects on the animal system its potassic congener. Compared with potassium bromide, however, strontium bromide is the better borne, having less tendency to derange digestion or to bring on the special symptoms of bromism. It may be prescribed in the same doses and for the same purposes as the bromides generally.

Calcium Bromide: $CaBr_2$.—The salt is official in the United States Pharmacopœia as *Calcii Bromidum*. Calcium Bromide. It is a "white, granular salt, odorless, of a sharp, saline taste, and very deliquescent. Soluble, at 15° C. (59° F.), in 0.7 part of water and in 1 part of alcohol; much more soluble at a boiling temperature. At 680° C. (1256° F.) the salt fuses, and at a higher temperature it is partly decomposed, with loss of bromine. The salt is neutral to litmus paper" (U. S. P.). The salt must be kept in well-stoppered bottles.

Calcium bromide does not seem to differ materially in properties from potassium bromide, and stands in medicine as an additional and not over-necessary substitute for the same, in the same range of application and in the same dosage. It was originally proposed by Dr. W. A. Hammond, in 1871. *Edward Curtis.*

[1] U. S. Dispensatory, 18th edition, quoting Charles D. Chase.
[2] Seguin: Archives of Medicine.

BROMIDIA is a proprietary remedy which is stated to contain in a fluiddrachm Chloral hydrate and potassium bromide, of each gr. xv., and gr. ½ each of the extracts of cannabis indica and hyoscyamus. Analyses indicate that it also contains oil of orange peel and extract of licorice. *W. A. Bastedo.*

BROMIDROSIS. — (Bromhidrosis, Osmidrosis; Ger. *Stinkender Schweiss.*) Bromidrosis, as a disease *per se*, is a pathological variation in the odor-producing constituents of the sweat *as secreted*, is associated as a rule with the functional disorder of the sweat apparatus, hyperidrosis, and, like it, may be either local or general. This condition as such, if it occurs at all, is rare.

The condition ordinarily denominated bromidrosis is due, as was taught by Hebra to be the case in the majority of instances, to a rapid decomposition of the sweat *after* its secretion, with the resultant odor, warranting the term stinking applied to it.

When local, as is more commonly the case, the regions affected are those in which sweating oftenest occurs in excess and in which its quick evaporation is more or less retarded or prevented by the nature of the parts or their covering, as the axillæ, groins, ano-genital region, and the feet—the last being by far the most frequent situation of the affection. Here the odor is marked and most characteristic, differing from the odor of other parts affected by its unmistakable, nauseating heaviness when once recognized—and one whiff is all sufficient,—the foul emanation rendering the near neighborhood of the unfortunate victim anything but pleasant, and sometimes impossible.

The change that takes place in the sweat is claimed to be due to the presence of a special micro-organism—the bacterium fœtidum, a micrococcus which Thin, of Prague, recognized in sweat obtained from the feet. It has been shown by Parkes that soldiers with uncovered feet do not suffer from this affection, and he claims that the only cause of the disease, if such it can be called, is the covering of the feet, the absence of all coverings giving no opportunity for the development in the secretions of the special bacterium.

Treatment in general is linked with that of hyperidrosis. A level teaspoonful of the precipitated sulphur in milk twice daily has been highly recommended. It is an empirical remedy, the action of it not being explained by Crocker, who claims to have succeeded more often by this than by any other procedure, local treatment not being necessary with it. However, dusting finely powdered boric acid well in between the toes and rubbing it into the stockings and shoes daily will be found as efficient, cleanly, and convenient a local method as any yet devised, and some local treatment will generally have to be resorted to. Hot water applied as hot as can be borne for a few minutes before using the boric acid is a great aid.

If the sulphur treatment purges too freely, its action may be controlled by astringents. In five to ten grain doses salicylate of soda may be found useful. This may be tried when patients object to the sulphur. It has cured some cases. Among other local remedies may be mentioned chromic acid; painted on the feet in five to ten per-cent. solution, according to the obstinacy of the case, every three to six weeks, it has been used successfully. Mutton suet with two per-cent. salicylic acid is in general use in the German army for rubbing on the feet, and further has the advantage of a lubricant when much walking is to be done. Formalin in one to ten per-cent. strengths in alcohol is of value. It should be followed by the use of dusting powders. A one-per-cent. solution of permanganate of potash has been well recommended. Various other remedies are extolled, but the boric acid will be found the best of all if preceded by the hot-water applications. *Charles Townshend Dade.*

BROMINE.—Bromine is official in the United States Pharmacopœia as *Bromum*, Bromine. It is described as "a heavy, dark, brownish red, mobile liquid, evolving, even at ordinary temperatures, a yellowish-red vapor, highly irritating to the eyes and lungs, and having a peculiar suffocating odor, resembling that of chlorine. Specific gravity, 2.990 at 15° C. (59° F.), soluble in 30 parts of water at 15° C. (59° F.), and readily soluble in alcohol or ether (with gradual decomposition of these liquids); also in carbon disulphide, and in chloroform, with a deep reddish-yellow color. On exposure to air or to heat it is completely volatilized" (U. S. P.). Bromine has the same intense affinity for hydrogen that has chlorine, and so, in similar manner to chlorine, determines the oxidation of organic matter in the presence of moisture by appropriating the hydrogen of the water and liberating the oxygen. The fumes of bromine are thus deodorant, like chlorine, and if present in an atmosphere in great volume would doubtless prove destructive to floating disease germs. Mixed directly with foul-smelling or infectious matter, bromine is powerfully deodorant and disinfectant. Yet practically it is of little use in such capacity, by reason of its costliness, its bad smell, its caustic and bleaching tendency, and the exceedingly irritant action of its vapor upon the human air passages. Squibb estimates that an ounce of bromine, accidentally spilled in an ordinary chamber, would render the air thereof dangerous to life.

Locally applied to living animal tissues, pure bromine is a very searching and painful caustic, and non-caustic dilutions act as detergent and stimulant lotions to foul or sloughing ulcers. Here again, however, the cost of the remedy and its offensiveness render it less practicable than its efficiency would suggest. For caustic purposes, bromine is applied clear, the patient being etherized, if the area to be cauterized is at all extensive, and the operator taking care that his eyes and nose do not come too near the fumes of the very volatile and pungent liquid. For a strong lotion, a ten per-cent. solution in water may be employed, wherein the bromine is made to dissolve by the addition of one-third of its weight of potassium bromide. For weaker lotions—any percentage less than three—bromine is directly soluble in water without any saline addition. Taken internally, bromine is doubtless absorbed as a bromide. It was formerly used as an internal medicine in the class of diseases for which iodine or the alkaline iodides are now so extensively employed. For the specific purposes of the alkaline bromides (see *Bromides*), bromine is practically unavailable, because of its irritant action and offensive taste. Bromine has been given internally in the dose of from three to six drops of a two-and-a-half-per-cent. aqueous solution.

Toxicology.—Bromine is an intensely irritant, corrosive poison. The fumes, inhaled, produce extreme irritation of the eyes, the air passages, and even the stomach. Severe bronchitis, pulmonary hemorrhage and inflammation, and death may result. Swallowed in overdose, bromine produces the usual symptoms of the corrosive poisons, viz., intense gastric irritation, collapse, and death. A half-ounce of bromine, swallowed, produced death in seven and a half hours. In case of poisoning by inhalation, the local irritation should be treated by the breathing of the atomized spray of an alkaline solution, such as Dobell's solution. In poisoning by swallowing, the stomach must be washed out and ammonia given, largely diluted and mixed with olive oil.
Edward Curtis.

BROMINE-ARSENIC SPRINGS.—Ashe County, North Carolina.

Post-Office.—Crumpler. Hotel.

Access.—Via Norfolk and Western Railroad to Chilhowie, Va., thence 39 miles by stage to the springs; also by private conveyance from Bristol, Tenn., 34 miles west.

This spring was discovered in 1885. Since that time it has come into extensive use, and its waters are widely sold. The location of the spring is in a mountainous district, 2,725 feet above the sea level. There is a hotel with accommodations for about one hundred persons at the resort. The spring flows about sixty gallons hourly. The following analysis was made by Prof. Henry Froehling:

Solids.	Grains.
Sodium carbonate	1.04
Calcium carbonate	.63
Magnesium carbonate	.62
Lithium carbonate	.03
Copper carbonate	Trace.
Zinc carbonate	Trace.
Calcium fluoride	Trace.
Potassium sulphate	.62
Potassium chloride	.21
Sodium chloride	.65
Sodium arseniate	Trace.
Sodium iodide	Trace.
Sodium bromide	.04
Sodium borate	Trace.
Aluminum phosphate	.12
Iron sulphate	.08
Silica	1.08
Organic matter	.03
Total	5.45

The water is unique in possessing recognizable quantities of copper and zinc. It also contains the somewhat rare ingredients of arseniate of sodium and the iodide and bromide of sodium. We also find an appreciable amount of carbonate of lithium and sulphate of iron. The water is not highly mineralized, but it possesses valuable qualities as a mild antacid, tonic, and alterative. It is useful in many of the affections benefited by this class of waters. *James K. Crook.*

BROMINE CHLORIDE.—By direct union of the two elements, bromine and chlorine, a compound is formed appearing as a reddish-yellow, volatile, mobile fluid, soluble in water. This compound is powerfully caustic, but has never been used in regular medicine except as an ingredient of a caustic paste used by Landolfi, of Naples, for the treatment of cancer. *Edward Curtis.*

BROMIPIN is an addition product of oil of sesame, containing ten per cent. of bromine. It is a yellow fluid having the appearance of a fixed oil, and it has a bland, oleaginous taste. In spite of the large amount of bromine which it contains, the oil is non-irritating and may be given pure by mouth. It is readily absorbed and its action is of the same character as that of the alkaline bromides. Losio claims that it surpasses potassium bromide in chorea, epilepsy, and trigeminal neuralgia. Dornblüth found that one drachm given at the evening meal would ward off a night attack of cardiac palpitation or angina pectoris. The oily taste of bromipin is not pleasant, but very soon the taste is acquired, and the patients continue to take it for a long time without gastric or intestinal disturbance. The dose is one-half to two drachms daily for restlessness and nervous irritability, for chorea or epilepsy, up to four drachms a day. It may be administered pure and unmixed, or with beer, or mixed with cacao, sugar, white of egg, and oil of cinnamon. A not unpleasant emulsion is made by taking two ounces of bromipin and emulsifying it with half an ounce of powdered acacia, half an ounce of syrup, and cinnamon or peppermint water to make four ounces, to be given in doses of from one to four drachms. *W. A. Bastedo.*

BROMO-ALBUMIN is a ten per-cent. bromine compound of peptone, albumose, or protogen. It is given in doses of from one-half to two drachms in epilepsy and other nervous conditions. Its indications are the same as those of the alkaline bromides. *W. A. Bastedo.*

BROMOFORM.—(Terbromide of formyl, $CHBr_3$.) In chemical composition it is analogous to chloroform, $CHCl_3$, and iodoform, CHI_3. It is formed by the action of brominated lime on alcohol in the same way that chloroform is made from chlorinated lime and alcohol. It is a bright clear liquid, specific gravity 2.9, taste sweet, and does not cause any irritation to the mucous membrane of the mouth; it has an ethereal odor, is almost insoluble in water, but is soluble in alcohol and ether. It is very volatile and is rapidly decomposed by light, bromine fumes being evolved which impart a pink color to the liquid.

Bromoform possesses anæsthetic properties, but in a less degree than chloroform, the period of excitement being less pronounced and the anæsthesia of shorter duration. It is also a powerful antiseptic.

A new application of this drug was brought to the notice of the profession in 1889 by Dr. Stepp, of Nüremberg, who advocated its use in whooping-cough. He claimed that the course of the disease was shortened in every instance, that the paroxysms were diminished in number and severity, that complications were less frequent, and that when present they were benefited by the treatment. The doses which he gave at different ages were as follows: From six months to one year, ♏ ij. three times a day; from one to two years, ♏ iij., from two to three, ♏ iv.; from three to four, ♏ v., and from four to seven, ♏ vi. or vij. In prescribing the remedy its high specific gravity must be remembered, one minim being equal to five drops.

The drug is given in a teaspoonful of water: it forms a "bead" in the water and is easily swallowed. It may be given in solution in water to which a small amount of alcohol is added, but should always be freshly prepared on account of its instability. It should be employed with some caution, as ill effects have frequently followed its use. It has produced nausea, vomiting, and diarrhœa, and other symptoms of gastro-intestinal irritation. The more pronounced toxic symptoms are pallor, cold perspiration, staggering, dilatation of pupils, heart failure, collapse, and a tendency to narcosis. Fatal cases have been reported (*Münch. medic. Wochensch.*, xlv., 1211; *L'union méd.*, September, 1891).

Stepp's method of administration is not to be recommended, and many of the cases of poisoning are explained by the uncertainty of this dose. It is preferable to use it dissolved in alcohol. Compound tincture of

cardamon and syrup of orange may be added. Another mixture that is recommended is an emulsion of bromoform with oil of sweet almonds, gum acacia, gum tragacanth, and syrup. All mixtures in which the drug is not dissolved are very uncertain, and require to be prepared with great care.

How the drug acts is uncertain; whether as a specific or on account of its germicidal properties, has not been determined. Dr. Stepp thinks bromine is excreted by the lungs after the drug has been decomposed in the system. The reports of others who have used it for this purpose corroborate the views of Dr. Stepp as to its efficacy in whooping-cough. *Beaumont Small.*

BROMOL.—(Tribromophenol.) This is formed by adding bromine water to a solution of phenol. It is deposited in white crystals; taste is sweet and astringent; odor resembles bromine; it is nearly insoluble in water, but is soluble in alcohol, ether, oils, and glycerin

It has been introduced as an antiseptic in the treatment of wounds, ulcers, etc. Applied in its pure state it has a slight caustic action and favors the removal of sloughs. As a dressing it is applied in solution in oil or as an ointment, one part in thirty. It has been used in diphtheria as a local application to disinfect the throat and remove the membrane.

When administered internally it is not acted on by the gastric secretions, and in the intestines is but slowly decomposed. Its action is therefore slow and prolonged. It is given in doses of gr. iij. to v. a day, and has proved of service as an intestinal antiseptic in cholera infantum and typhoid fever. For infants gr $\frac{1}{4}$ to $\frac{1}{2}$ may be given at each dose. *Beaumont Small.*

BRONCHI, MINUTE ANATOMY OF.—As a preface to the histology of the bronchi, a short résumé of the gross anatomy seems here desirable. The bronchi—more properly bronchia, $\beta\rho\acute{o}\gamma\chi\iota\alpha$, meaning swallow or throat—probably received the name through Plato, who taught that their function was to receive the liquids, the œsoph-

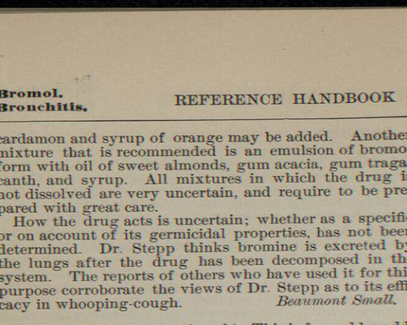

FIG. 1053.—Represents a Transverse Section of the Bronchial Wall at the Fifth Bifurcation in the Human Adult. *a*, Epithelial layer of mucous membrane; *b*, hyaline basement membrane, formed from *c*, internal elastic layer, showing its varying thickness: *d*, *d*, muscular layer; *e*, mucipurous crypts; *f*, cartilaginous lamina; *g*, external layer; *h*, branch of bronchial artery. (About 30 diameters.) (Drawn with camera by Dr. F. Cary.)

agus receiving the solids. Aristotle having supported this theory, the name remained so long in medical use as to become a fixture.

The bronchia, beginning at the tracheal bifurcation opposite the third dorsal vertebra (fourth in female), terminate in the pulmonary lobules. The primary tracheal branches, from their distribution, are named the right and left bronchus. The former is shorter, larger, and more horizontal than the latter, and the septum bronchiale separating them is placed to the left of the longitudinal (in the recumbent posture of the body) axis of the treachea. Hence bodies falling into the trachea lodge more frequently in the right bronchus. Hyrtl teaches that post-mortem examinations of the new-born, dying after a few respirations, show that the right lung respires before the left, and he explains the fact by the difference in size and location of the beginning of the right bronchus. The general rule of dichotomous subdivision obtains, but is not without exception; *e.g.*, the right bronchus subdividing into three branches, one for each lobe. Occasional small branches are given off by the main trunk. Having reached the diameter of 0.21 mm. ($\frac{1}{120}$ inch), they enter the apices of the pulmonary lobules. Here again branching at acute angles they dilate slightly, becoming funnel-shaped, whence the name "infundibula vesicæ." (See article *Lungs*.)

STRUCTURE.—The bronchia are hollow, cylindrical tubes, which retain in structure, throughout a large portion of their extent, the characteristics of the trachea. Like the latter, they consist of four distinct layers: an external fibrous, a muscular, an internal elastic, and a mucous layer.

The *External Fibrous Layer* consists of a dense meshwork of connective tissue, in which are to be found rings or laminæ of hyaline cartilage. In the primary bronchia these are disposed as in the trachea, *i.e.*, in broken rings like the letter **C**, held together by fibrous bands. The ring is made complete by small transverse bundles of unstriped muscular fibres attached by microscopic tendons to the ends of the rings. By their contraction they increase the curvature of the cartilage and so diminish the calibre of the tube. The right bronchus contains six to eight of these cartilages; the left ten to twelve. Further removed from the trachea the cartilages gradually lose their ring-like shape, and are disposed in irregular polygonal laminæ. Becoming smaller and less frequent, they finally disappear in tubes of less diameter than 0.23 mm. ($\frac{1}{110}$ inch), the fibrous layer still continuing to form the external coat.

The *Muscular Layer* lies within the fibrous layer just described. It consists of separate bundles of unstriped muscular fibres, disposed for the most part transversely to the tube. It is better developed in the intervals between the cartilages than just beneath them. As the cartilages disappear this muscular layer becomes better and better developed, until at last it completely surrounds the bronchioles, which, on section, but for the epithelial lining, might be mistaken for arterioles. The muscular layer can be traced to the final branching of the bronchiole to form the alveolar passages, where, according to Rindfleisch, it becomes again better developed into a sort of "sphincter" at the point of entrance to the alveolar passages. The function of the muscular layer is to narrow the calibre of the tubes. This is only manifested to any appreciable extent in the bronchioles. The cartilages prevent any decided narrowing where they exist. In the experiments of Dr. C. J. B. Williams with electrical stimulation on bronchioles of less than a line in diameter, they were seen to contract until they nearly obliterated their lumen. Dr. Gairdner suggested that the contractility of the minute bronchioles may serve to expel collections of mucus which have accumulated in them, and which neither ciliary action nor the ordinary expiratory efforts would dislodge.

The Internal Elastic Layer.—Within the muscular layer, and beneath the mucous membrane, lie longitudinal bundles of elastic tissue quite regularly disposed. They project, as it were, partly into the lumen of the tube, and so give, on transverse section, a wavy, corrugated appearance to the lining membrane; on longitudinal section, a grooved or furrowed one. Piercing this as well as the muscular layer, chiefly in the bronchial tubes containing cartilages, are to be seen the muciparous ducts, lined with epithelium, leading inward to open on the free surface of the mucous membrane. The mucous

crypts lie in the external fibrous layer, chiefly in the intervals between the cartilages.

The *Mucous Membrane* of the bronchia and bronchioles, forming the internal layer, possesses, throughout the greater portion of its extent, the characteristics of that of the tracheal mucous membrane. Like the latter, it consists of epithelial cells of the ciliated columnar variety,

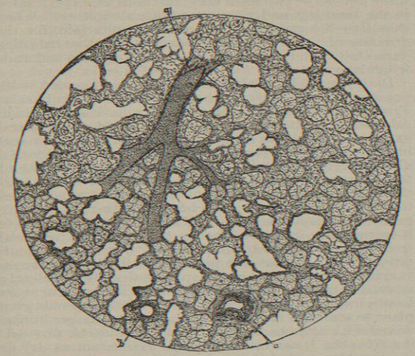

FIG. 1054.—*a*, A minute bronchiole splitting into the *ultimate* branches, which terminate in the alveolar passages; the epithelium has become of the simple pavement variety; on the left branch can be seen one of the so-called "saccular dilatations"; *b*, artery; *c*, medium-sized bronchiole having no cartilaginous lamina. The remainder of the field is normal lung tissue. (About 30 diameters.) (Drawn by Dr. F. Cary, from a microscopical section, with camera.)

superimposed upon a basement membrane, which latter is made by a condensation of the inner part of the internal elastic layer. When the tube has reached the diameter of 0.2 mm. ($\frac{1}{50}$ inch), these cells lose their cilia, become shorter, smaller, and rounded, in the ultimate tubules becoming the simple pavement cells. Here the membrane loses its character as a mucous membrane, and resembles that which lines the alveoli (see article *Lungs*). Here and there in the larger tubes are to be found the cup-shaped cells (*Becherzellen*) of Schulze, the function of which is yet unknown.

Vascular Supply.—From the thoracic aorta are given off the bronchial arteries, which, receiving occasionally branches from the first intercostal and internal mammary arteries, accompany closely the subdivisions of the bronchia, supplying their walls, the walls of the large pulmonary vessels, the lymphatic glands, and the connective tissue of the lungs, to terminate finally in capillaries which inosculate freely with the respiratory plexus. Injections thrown into these vessels will fill also the capillary plexus of the arteria pulmonalis. The corresponding bronchial veins empty in part into the vena azygos, in part into the vena pulmonalis; the venous radicles from the ultimate bronchioles emptying into the latter, those corresponding to the arterial branches to the bronchia and lymphatics, into the former.

Lymphatic Supply.—The lymphatics arise in the alveolar septa. Stomata open on the alveolar walls between the epithelial cells, communicating thus directly with the alveolar cavity. They form a plexus in the submucous tissues, accompany the branches of the bronchia, as well as the pulmonary veins and arteries, emptying finally into the bronchial glands at the roots of the lungs. Within the lungs they often possess a gray or black speckled appearance, from the absorption of pigment or foreign bodies.

Nerve Supply.—The nerve supply to the lungs is derived from the pulmonary plexuses formed from branches of the vagus and sympatheticus. The filaments from these plexuses—situated at the lung hilum—follow the ramifications of the bronchia, becoming lost finally on them, and in the parenchyma of the lungs. When carefully stained they are seen to possess, in parts of their course, the microscopic ganglia to which Remak and Schiff first called attention.

The sensibility of the bronchia must be very slight; at least this seems to be true of their smaller branches, because of the slight complaint made by consumptives in whom large portions of bronchial and lung structure are being destroyed. *Lewis L. McArthur.*

BRONCHITIS.—In no affection is the practical importance of the distinction between acute and chronic disease better illustrated than in bronchitis. A bronchitis of recent origin or of sudden development is hardly the same disease as a bronchitis of long standing, because, aside from the fact that they both involve the same locality, and that cough is a leading symptom in both, the essential features in the course of each are quite dissimilar. Moreover, in acute bronchitis itself the conditions vary to such an extent, according to the part of the bronchial tract affected, that it will be more advantageous to consider so-called capillary bronchitis separately. Hence we prefer, in beginning with acute bronchitis, to restrict the term to that common affection known as an acute catarrh of the larger and medium-sized bronchi.

1. ACUTE BRONCHITIS. — *Symptomatology.* — Nearly every one in our climate has experienced the first stage, at least, of an attack of this complaint. When a catarrh of the upper respiratory tract has been severe enough to pass beyond the larynx and trachea and become a veritable bronchitis, though yet only extending to the primary divisions, the symptoms are then readily distinguishable at sight from any other cough-producing affection. Pain is soon complained of and the patient's gesture in describing it is distinctive. Instead of applying his finger ends against one side, as he does to indicate the stitch or side stab of a pleurisy or a pneumonia, or holding his side as in pleurodynia, he lays his open hand on his breast as if taking an oath, and then passes it across the chest from side to side to indicate a suffocative sense of pain and tightness, which in severe cases feels as if the chest were transfixed with a disc of iron. Instead, also, of a carefully chosen and maintained decubitus, he changes frequently about, or else sits up and leans forward, a sure sign of a bilateral cause in dyspnœa, and one, therefore, which usually would exclude either a pneumonia or a pleurisy or phthisis. Although the patient may complain of difficult breathing, and although in active attacks he may breathe with both nostrils dilated, yet it will be noticed that, quite differently from what takes place in other febrile pulmonary affections, the respiration is but slightly accelerated; and, furthermore, the thermometer tells the same story in this as in inflammation of other mucous membranes, namely, that it rarely causes a greater rise than 100.5° to 101.5° F., unless some other element is entering into the course of the complaint. The other indications of a febrile complaint are usually present in a moderate degree also. The face is flushed, the eyes are watery, the voice is husky, the pulse somewhat faster than usual, the tongue furred, and along with a dry skin (not always) and headache there is also some chilliness, but not a distinct rigor, like that which ushers in a pneumonia.

The pain of bronchitis is an early symptom and often a sign that an acute catarrh, in its journey downward, has just entered the bronchi; for it is one of the peculiarities of the nervous supply of the respiratory tract that its sensitiveness differs markedly in different portions. The much greater irritability of the larynx over the trachea is well known, but it has been found by experiment that nearly the same proneness to cough on irritation is localized at the bifurcation of the bronchi. From this point onward, however, the irritability progressively diminishes until, as a result, serious accumulations of fluid may form in the smaller bronchi without occasion-